PTO/SB/21 (04-07) Approved for use through 09/30/2007, OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE of 1925, ho persons are required to respond to a collection of information unless it displays a valid OMB control number.

BEMAR	Application Number	10/591,374						
TRANSMITTAL	Filing Date	August 31, 2006						
FORM	First Named Inventor	Mark Franklin Davis						
	Art Unit	2615						
(to be used for all correspondence after initia	Examiner Name							
· · · · · · · · · · · · · · · · · · ·	Attorney Docket Number	DOL11505 US						
Total Number of Pages in This Submission								
ENCLOSURES (Check all that apply)								
Fee Transmittal Form Fee Attached	Drawing(s) Licensing-related Papers Petition	After Allowance Communication to TC Appeal Communication to Board of Appeals and Interferences Appeal Communication to TC						
After Final Affidavits/declaration(s) Extension of Time Request Express Abandonment Request Information Disclosure Statement Certified Copy of Priority Document(s) Reply to Missing Parts/	Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence Ad Terminal Disclaimer Request for Refund CD, Number of CD(s) Landscape Table on CD Remarks	Other Enclosure(s) (please Identify below): PTO-1449 (4 Sheets), copy of cited references (13), Certificate of Mailing and return receipt postcard						
Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53	ATURE OF APPLICANT, ATTOR	RNEY, OR AGENT						
Firm Name GALLAGHER & LATHRO	np 1							
Signature	C. Soll							
Printed name Thomas A. Gallagher								
Date May 31, 2007	R	eg. No. 24,815						
	CERTIFICATE OF TRANSMISSI							
sufficient postage as first class mail in an e the date shown below:	being facsimile transmitted to the USPTO nvelope addressed to: Commissioner for	or deposited with the United States Postal Service with Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on						
Signature	M. Strange							
Typed or printed name Karen M. Strang	\ \	Date May 31, 2007						

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Applicant(s): Mark Franklin Davis

Serial No.: 10/591,374

Filing Date: August 31, 2006

Title: Multichannel Audio Coding

Conf. No. 8002

Examiner:

Art Unit: 2615

May 31, 2007 San Francisco, California

Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to the duty of disclosure set forth in 37 CFR § 1.56, Applicant(s) respectfully submit the following information disclosure statement.

The disclosed references are:

US 1,124,580, issued January 12, 1915, Edward H. Amet, filed July 3, 1911

US 1,850,130, issued March 22, 1932, D. K. Gannett, filed October 31, 1928

US 1,855,147, issued April 19, 1932, W. B. Jones, filed January 11, 1929

US 2,114,680, issued April 19, 1938, A. N. Goldsmith, filed December 24, 1934

US 2,819,342, issued January 7, 1958, F. K. Becker, filed December 30, 1954

US 2,860,541, issued November 18, 1958, W. R. Dresser, filed April 27, 1954

US 2,927,963, issued March 8, 1960, Jordan, et al., filed January 4, 1955

US 3,046,337, issued July 24, 1962, W. F. Hornyak, filed August 5, 1957

US 3,067,292, issued December 4, 1962, J. B. Minter 2nd, filed February 3, 1958.

US 3,846,719, issued November 5, 1974, Ray Milton Dolby, filed September 13, 1973

Docket: DOL11505 US

- 1 -

US 4,308,424, issued December 29, 1981, Robert G. Bice, Jr., filed April 14, 1980 US 4,359,605, issued November 16, 1982, Haramoto, et al., filed November 13, 1980 US 4,799,260, issued January 17, 1989, Mandell, et al., filed February 26, 1986 US 4,922,535, issued May 1, 1990, Ray M. Dolby, filed March 3, 1986 US 4,941,177, issued July 10, 1990, Mandell, et al., filed July 22, 1988 US 5,046,098, issued September 3, 1991, Mandell, et al., filed June 1, 1989 US 5,105,462, issued April 14, 1992, Lowe, et al, filed May 2, 1991 US 5,164,840, issued November 17, 1992, Kawamura, et al., filed August 28, 1989 US 5,172,415, issued December 15, 1992, James W. Fosgate, filed June 8, 1990 US 5,274,740, issued December 28, 1993, Davis, et al., filed June 21, 1991 US5,394,473, issued February 28, 1995, Grant A. Davidson, filed December 11, 1991 US 5,400,433, issued March 21, 1995, Davis, et al., filed December 28, 1993 US 5,428,687, issued June 27, 1995, Willcocks, et al., filed December 14, 1992 US 5,504,819, issued April 2, 1996, James W. Fosgate, filed July 18, 1994 US 5,583,963, issued December 10, 1996, Bruno Lozach, filed January 21, 1994. US 5,621,855, issued April 15, 1997, Veldhuis, et al., filed October 19, 1994 US 5,625,696, issued April 29, 1997, James W. Fosgate, filed April 2, 1996 US 5,633,981, issued May 27, 1997, Mark F. Davis, filed June 7, 1995 US 5,644,640, issued July 1, 1997, James W. Fosgate, filed March 27, 1996 US 5,727,119, issued March 10, 1998, Davidson, et al., filed March 27, 1995 US 5,909,664, issued June 1, 1999, Davis, et al., filed May 23, 1997 US 6,021,386, issued February 1, 2000, Davis, et al., filed March 9, 1999 US 6,807,528, issued October 19, 2004, Truman, et al., filed May 8, 2001 US Re 36,714, reissued May 23, 2000, Brandenburg, et al., reissue filed November 10, 1994

Docket: DOL11505 US

US 2003/0035553, published February 20, 2003, Baumgarte, et al., filed November 7, 2001

US 2004/0125960, published July 1, 2004, Fosgate, et al., filed August 30, 2001.

US 2004/0165730, published August 26, 2004, Brett Graham Crockett, filed February 26,2002

WO 01/41504, published June 7, 2001, James W. Fosgate, filed November 28, 2000

WO 01/41505, published June 7, 2001, Gundry, et al., filed November 29, 2000

WO 02/063925, published August 15, 2001, Mark Franklin Davis, filed February 7, 2002

WO 02/097792, published December 5, 2002, Brett Graham Crockett, filed February 26, 2002

WO 02/19768, published March 7, 2002, Fosgate, et al., filed August 30, 2001

WO 04/019656, published March 4, 2004, Mark Franklin Davis, filed August 6, 2003

ATSC Standard A52/A: Digital Audio Compression Standard (AC-3), Revision A, Advanced Television Systems Committee, 20 August 2001.

Baumgarte, et al., "Why Binaural Cue Coding is Better Than Intensity Stereo Coding," 2002 May 1-13, Presented at the 112th AES Convention, Munich, Germany.

Baumgarte, et al., "Estimation of Auditory Spatial Cues for Binaural Cue Coding," 2002, IEEE, pp II-1801-II-1804.

Cheng, et al., "Introduction to Head-Related Transfer Functions (HRTS'S): Representations of HRTF'S in Time, Frequency, and Space," (invited tutorial). coreyc@eecs.umich.edu; http://www.eecs.umich.edu/~coreyc.

Faller, et al., "Binaural Cue Coding Applied to Stereo and Multi-Channel Audio Compression," 2002 May 10-13, presented at the 112th AES Convention, Munich, Germany.

Faller, et al., "Binaural Cue Coding: A Novel and Efficient Representation of Spatial Audio," 2002, IEEE, pp II-1841-II-1844.

Faller, et al., "Efficient Representation of Spatial Audio Using Perceptual Parametrization," 21-24 October 2001, IEEE Workshop on Applications of Signal Processing to Audio and Acoustics, pp 199-202.

Percival, W. S., "A Compressed-Bandwidth Stereophonic System for Radio Transmission," IEEE Paper No. 3152 E, November 1959.

Docket: DOL11505 US

Princen, et al., "Subband/Transform Coding Using Filter Bank Designs on Time Domain Aliasing Cancellation," Proc. Int. Conf. Acoust., Speech, and Signal Proc., May 1987, pp 2161-2164

Schroeder, et al., "Colorless Artificial Reverberation," 1961, IRE Transactions on Audio, Vol. AU-9, pp 209-214

Schroeder, M. R., "Natural Sounding Artificial Reverberation," July 1962, Journal AES, Vol. 10, No. 2, pp 219-223

Todd, et al., "AC-3: Flexible Perceptual Coding for Audio Transmission and Storage," 1994 February 26-March 1, presented at the 96th AES Convention as Preprint 3796.

Vernon, Steve, "Design and Implementation of AC-3 Coders," reprinted by permission of IEEE, published in IEEE Tr. Consumer Electronics, Vol. 41, No. 3, August 1995.

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made (37 CFR §1.97(g)), admission that the information cited is, or is considered to be material to patentability, or that no other material information exits.

The filing of this Information Disclosure Statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

Applicant wishes to make of record the documents listed on the accompanying form PTO-1449. Copies of the references are submitted herewith. It is respectfully requested that the Examiner initial the cited references on the form and that it be made of record in the application and that a copy of the initialed form be sent to applicants with the next communication from the Examiner.

Respectfully submitted,

Thomas A. Gallagher

Reg. No. 24,815

601 California St., Suite 1111 San Francisco, CA 94108-2805

Telephone: (415) 989-8080 Facsimile: (415) 989-0910

Enc. Transmittal Form

PTO-1449 (4 Sheets) Cited References (13) Return Receipt Postcard Certificate of Mailing Under 37 CFR 1.8

I certify that this Information Disclosure Statement and any enclosed materials are being deposited with the United States Postal Service on May 31, 2007 with sufficient postage as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Karen M. Strange

Docket: DOL11505 US

Substitute Form PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND PRADEMARK OFFICE

Information Disclosure Statement

DOCKET
DOL11505 US

APPLICANT
Mark Franklin Davis

FILING DATE
August 31, 2006

S.N.
10/591,374

GROUP
2615

U.	S. PATENT DOCUMENTS
NC	NAME OF PATENTEE O

*Exam. Initial	Cite No.	DOCUMENT NUMBER Number - Kind Code	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	FILING DATE
		US-1,124,580	01/12/1915	Edward H. Amet	07/03/1911
		US-1,850,130	03/22/1932	D.K. Gannett	10/31/1928
		US-1,855,147	04/19/1932	W.B. Jones	01/11/1929
		US-2,114,680	04/19/1938	A.N. Goldsmith	12/24/1934
		US-2,819,342	01/07/1958	F.K. Becker	12/30/1954
		US-2,860,541	11/18/58	W.R. Dresser	04/27/1954
		US-2,927,963	03/08/1960	Jordan, et al.	01/04/1955
		US-3,046,337	07/24/1962	W.F. Hornyak	08/05/1957
		US-3,067,292	12/04/1962	J.B. Minter 2 nd	02/03/1958
		US-3,846,719	11/05/1974	Ray Milton Dolby	11/13/1973
		US-4,308,424	12/29/1981	Robert G. Bice, Jr.	04/14/1980
		US-4,359,605	11/16/1982	Haramoto, et al.	11/13/1980

FOREIGN PATENT DOCUMENTS

*Exam, Initial	Cite No.	DOCUMENT NUMBER Number – Kind Code	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	TRANSLATION YES NO
		WO 01/41504	06/07/2001	James W. Fosgate	
		WO 01/41505	06/07/2001	Gundry, et al.	
		WO 02/063925	08/15/2001	Mark Franklin Davis	
		WO 02/097792	12/05/2002	Brett Graham Crockett	
		WO 02/19768	03/07/2002	Fosgate, et al.	
		WO 04/019656	03/04/2004	Mark Franklin Davis	

NON-PATENT LITERATURE DOCUMENTS

ATSC Standard A52/A: Digital Audio Compression Standard (AC-3), Revision A, Advanced Television Systems Committee, 20 August 2001. Baumgarte, et al., "Why Binaural Cue Coding is Better Than Intensity Stereo Coding," 2002 May 1-13, Presented at the 112th AES Convention, Munich, Germany. Baumgarte, et al., "Estimation of Auditory Spatial Cues for Binaural Cue Coding," 2002, IEEE, pp II-1801-II-1804. Cheng, et al., "Introduction to Head-Related Transfer Functions (HRTS'S): Representations of HRTF'S in Time, Frequency, and Space," (invited tutorial). coreyc@eecs.umich.edu; http://www.eecs.umich.edu/~coreyc. Faller, et al., "Binaural Cue Coding Applied to Stereo and Multi-Channel Audio Compression," 2002 May 10-13, presented at the 112th AES Convention, Munich, Germany.	*Exam. Cite		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
Presented at the 112th AES Convention, Munich, Germany. Baumgarte, et al., "Estimation of Auditory Spatial Cues for Binaural Cue Coding," 2002, IEEE, pp II-1801-II-1804. Cheng, et al., "Introduction to Head-Related Transfer Functions (HRTS'S): Representations of HRTF'S in Time, Frequency, and Space," (invited tutorial). coreyc@eecs.umich.edu; http://www.eecs.umich.edu/~coreyc. Faller, et al., "Binaural Cue Coding Applied to Stereo and Multi-Channel Audio Compression," 2002			ATSC Standard A52/A: Digital Audio Compression Standard (AC-3), Revision A, Advanced Television						
Cheng, et al., "Introduction to Head-Related Transfer Functions (HRTS'S): Representations of HRTF'S in Time, Frequency, and Space," (invited tutorial). coreyc@eecs.umich.edu; http://www.eecs.umich.edu/~coreyc. Faller, et al., "Binaural Cue Coding Applied to Stereo and Multi-Channel Audio Compression," 2002									
in Time, Frequency, and Space," (invited tutorial). coreyc@eecs.umich.edu; http://www.eecs.umich.edu/~coreyc. Faller, et al., "Binaural Cue Coding Applied to Stereo and Multi-Channel Audio Compression," 2002									
	7		in Time, Frequency, and Space," (invited tutorial). coreyc@eecs.umich.edu;		1				
			Faller, et al., "Binaural Cue Coding Applied to Stereo and Multi-Channel Audio Compression," 2002						

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP; draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant.

Substitute Form PTO-1449

Information Disclosure Statement

DOCKET S.N. 10/591,374 **DOL11505 US** APPLICANT Mark Franklin Davis FILING DATE GROUP August 31, 2006 2615

U.S. PATENT DOCUMENTS

*Exam. Initial	Cite No.	DOCUMENT NUMBER Number - Kind Code	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	FILING DATE
		US-4,799,260	01/17/1989	Mandell, et al.	02/26/1986
		US-4,922,535	05/01/1990	Ray M. Dolby	03/03/1986
		US-4,941,177	07/10/1990	Mandell et al.	07/22/1988
		US-5,046,098	09/03/1991	Mandell et al.	06/01/1989
		US-5,105,462	04/14/1992	Lowe, et al.	05/02/1991
·		US-5,164,840	11/17/1992	Kawamura, et al.	08/28/1989
		US-5,172,415	12/15/1992	James W. Fosgate	06/08/1990
		US-5,274,740	12/28/1993	Davis, et al.	06/21/1991
		US-5,394,473	02/28/1995	Grant A. Davidson	12/11/1991
		US-5,400,433	03/21/1995	Davis, et al.	12/28/1993
•		US-5,428,687	06/27/1995	Willcocks, et al.	12/14/1992
		US-5,504,819	04/02/1996	James W. Fosgate	07/18/1994
		•	FOR	EIGN PATENT DOCUMENTS	

*Exam. Initial	Cite No.	DOCUMENT NUMBER Number – Kind Code	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	TRANSLAT YES	TION NO
,						

NON-PATENT LITERATURE DOCUMENTS.

*Exam. Cite Initial No.		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
		Faller, et al., "Binaural Cue Coding: A Novel and Efficient Representation of Spatial Audio," 2002, IEEE, pp II-1841-II-1844.						
		Faller, et al., "Efficient Representation of Spatial Audio Using Perceptual Parametrization," 21-24 October 2001, IEEE Workshop on Applications of Signal Processing to Audio and Acoustics, pp 199-202.						
-		Percival, W. S., "A Compressed-Bandwidth Stereophonic System for Radio Transmission," IEEE Paper No. 3152 E, November 1959.						
		Princen, et al., "Subband/Transform Coding Using Filter Bank Designs on Time Domain Aliasing Cancellation," Proc. Int. Conf. Acoust., Speech, and Signal Proc., May 1987, pp 2161-2164						
		Schroeder, et al., "Colorless Artificial Reverberation," 1961, IRE Transactions on Audio, Vol. AU-9, pp 209-214						

EXAMINER DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP; draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant.

Information Disclosure Statement

Substitute Form PTO-1449

TAMENT OF COMMERCE NO TRADEMARK OFFICE

DOCKET **DOL11505 US**

S.N. 10/591,374

APPLICANT

Mark Franklin Davis

FILING DATE August 31, 2006

GROUP 2615

U.S. PATENT DOCUMENTS

*Exam. Initial	Cite No.	DOCUMENT NUMBER Number - Kind Code	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	FILING	G DATE
		US-5,583,963	12/10/1996	Bruno Lozach	01/21	/1994
		US-5,621,855	04/15/1997	Veldhuis, et al.	10/19	/1994
		US-5,625,696	04/29/1997	James W. Fosgate	04/02	2/1996
		US-5,633,981	05/27/1997	Mark F. Davis	06/07	7/1995
		US-5,644,640	07/01/1997	James W. Fosgate	03/27	7/1996
		US-5,727,119	03/10/1998	Davidson, et al.	03/27	7/1995
		US-5,909,664	06/01/1999	Davis, et al.	05/23	/1997
·		US-6,021,386	02/01/2000	Davis, et al.	03/09	/1999
		US-6,807,528	10/19/2004	Truman, et al.	05/08	3/2001
<u>.</u>		US-Re 36,714	05/23/2000	Brandenburg, et al.	11/10	/1994
		US-2003/0035553	02/20/2003	Baumgarte, et al.	11/07	7/2001
		US-2004/0125960	07/01/2004	Fosgate, et al.	08/30	/2001
	1	1	FOR	EIGN PATENT DOCUMENTS		
•Exam. Initial	Cite No.	DOCUMENT NUMBER Number – Kind Code	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	TRANS	LATION NO
			NON-PAT	TENT LITERATURE DOCUMENTS		
*Exam. Initial	Cite No.			LETTERS), title of the article (when appropriate), title of the item (book, magazine, te, page(s), volume-issue number(s), publisher, city and/or country where published.	TRANS	LATION NO
				Artificial Reverberation," July 1962, Journal AES, Vol. 10, No. 2,		
				al Coding for Audio Transmission and Storage," 1994 February Convention as Preprint 3796.		
			•	tation of AC-3 Coders," reprinted by permission of IEEE, ronics, Vol. 41, No. 3, August 1995.		
				•		
EXAMINE	R			DATE CONSIDERED	<u> </u>	

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP; draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant.

		/3	200/	y.)	•		SHEET	4 OF 4
Substitu	ite Fo	rm PTO-1449	DEPARTMENT	T OF COMMERCE ADEMARK OFFICE	DOCKET DOL11505 US	S.N. 10/591,374		
	Inf	ORMATION DISCLO			APPLICANT Mark Franklin Davis			
					FILING DATE August 31, 2006	GROUP 2615		
			U	S. PATENT	DOCUMENTS	<u> </u>		
*Exam. Initial	Cite No.	DOCUMENT NUMBER Number - Kind Code	PUBLICATION DATE		ME OF PATENTEE OR APPLICANT		FILING	DATE
		US-2004/0165730	08/26/2004	Brett Graha	m Crockett		02/26	5/2002
•		US-						
		US-						•
		US-						
		US-						
		US-		 		<u> </u>		
		US-				. ,		· · · · · · · · · · · · · · · · · · ·
	;	US-						
		US-						
		US-				· •		
•		US-						
		US-						
			FOR	EIGN PATEI	NT DOCUMENTS		<u> </u>	
*Exam. Initial	Cite No.	DOCUMENT NUMBER Number – Kind Code	PUBLICATION DATE	NA	ME OF PATENTEE OR APPLICANT		TRANS YES	LATION NO
IIIII	140.	Trumoer - Rind Code	DATE				120	
					1988-1981 - 1988-1988-1988-1988-1988-198			
		<u> </u>	NON-PAT	TENT LITER	ATURE DOCUMENTS	 	. J	
*Exam. Initial	Cite No.	Include name of the	he author (in CAPITAL L	ETTERS), title of	the article (when appropriate), title of the control of the contro	ne item (book, magazine,	TRANS YES	LATION NO
muai	190.	journai, seriai, syin	posium, catalog, etc.), da	te, page(s), voiume	-issue number(s), puonsner, eny anaron	country where paonisied.	123	NO
			<u> </u>					
	,		O NAME.					
EXAMINER		<u> </u>			DATE CONSIDERED		_	<u></u>
EVANAT	NED.	Initial if aitation consider	ed whether or not a	vitation is in ac-	formance with MDED, dean 1	ne through citation if not	in conforma	nce
LAAMI	NCK:	minai ii chanon consider	eu, whether of not c	itation is in col	nformance with MPEP; draw li	me amough chanon if not	m winoiilla	HCC

and not considered. Include copy of this form with next communication with applicant.